## WHAT IS CLAIMED IS:

1. A method of the rapeutically treating a disease characterized by an amyloid deposit of  $A\beta$  in a patient, comprising:

administering an immunogenic  $A\beta$  fragment in a regime effective to induce an immune response comprising antibodies to the  $A\beta$  fragment and thereby therapeutically treat the disease in the patient; and

monitoring the patient for the immune response, wherein the monitoring comprises detecting antibodies having  $A\beta$  binding specificity.

- 2. The method of claim 1, wherein the patient is a human.
- 3. The method of claim 1, wherein the disease is Alzheimer's disease.
- 4. The method of any one of claims 1-3, wherein the patient is asymptomatic.
  - 5. The method of any one of claims 1-3, wherein the patient is under 50.
- 6. The method of any one of claims 1-3, wherein the patient has inherited risk factors indicating susceptibility to Alzheimer's disease.
- 7. The method of any one of claims 1-3, wherein the patient has no known risk factors for Alzheimer's disease.
- 8. The method of any one of claims 1-3, wherein the dose of the A $\beta$  fragment administered to the patient is greater than 10  $\mu$ g.
- 9. The method of any one of claims 1-3, wherein the dose of the A $\beta$  fragment administered to the patient is at least 20  $\mu g$ .
- 10. The method of any one of claims 1-3, wherein the dose of the A $\beta$  fragment administered to the patient is at least 50  $\mu$ g.

- 11. The method of any one of claims 1-3, wherein the dose of the  $A\beta$  fragment administered to the patient is at least 100  $\mu$ g.
- 12. The method of any one of claims 1-3, wherein the  $A\beta$  fragment is administered in aggregated form.
- 13. The method of any one of claims 1-3, wherein the A $\beta$  fragment is administered orally, subcutaneously, intramuscularly, topically or intravenously.
- 14. The method of any one of claims 1-3, wherein the  $A\beta$  fragment is administered intramuscularly or subcutaneously.
- 15. The method of claim 1, wherein the  $A\beta$  fragment is administered with GM-CSF in the regime.
- 16. The method of claim 1, further comprising administering an adjuvant, wherein the adjuvant enhances the immune response to the A $\beta$  fragment.
- 17. The method of claim 16, wherein the adjuvant and the  $A\beta$  fragment are administered together as a composition.
- 18. The method of claim 16, wherein the adjuvant is administered before the  $A\beta$  fragment.
- 19. The method of claim 16, wherein the adjuvant is administered after the  $A\beta$  fragment.
  - 20. The method of claim 16, wherein the adjuvant is alum.
  - 21. The method of claim 16, wherein the adjuvant is QS21.
  - 22. The method of claim 16, wherein the adjuvant is M-CSF.

- The method of claim 16, wherein the dose of the A $\beta$  fragment is greater than 10  $\mu g$ .
- The method of claim 16, wherein the dose of the A $\beta$  fragment is at least 20  $\mu g$ .
- The method of claim 16, wherein the dose of the A $\beta$  fragment is at least 50  $\mu g$ .
- The method of claim 16, wherein the dose of the A $\beta$  fragment is at least 100  $\mu g$ .
  - 27. The method of claim 16, wherein the A $\beta$  fragment is A $\beta$ 1-5.
- 28. The method of claim 27, wherein A $\beta$ 1-5 consists of the first five N-terminal amino acids of SEQ ID NO:1.
  - 29. The method of claim 16, wherein the A $\beta$  fragment is A $\beta$ 1-6.
- 30. The method of claim 29, wherein A $\beta$ 1-6 consists of the first six N-terminal amino acids of SEQ ID NO:1.
  - 31. The method of claim 16, wherein the A $\beta$  fragment is A $\beta$ 1-12.
- 32. The method of claim 31, wherein A $\beta$ 1-12 consists of the first twelve N-terminal amino acids of SEQ ID NO:1.
- 33. A method of prophylaxis of a disease characterized by an amyloid deposit of  $A\beta$  in a patient, comprising:

administering an immunogenic  $A\beta$  fragment in a regime effective to induce an immune response comprising antibodies to the  $A\beta$  fragment and thereby effect prophylaxis of the disease in the patient; and

monitoring the patient for the immune response, wherein the monitoring comprises detecting antibodies having  $A\beta$  binding specificity.

- 34. The method of claim 33, wherein the patient is a human.
- 35. The method of claim 33, wherein the disease is Alzheimer's disease.
- 36. The method of any one of claims 33-35, wherein the patient is asymptomatic.
- 37. The method of any one of claims 33-35, wherein the patient is under 50.
- 38. The method of any one of claims 33-35, wherein the patient has inherited risk factors indicating susceptibility to Alzheimer's disease.
- 39. The method of any one of claims 33-35, wherein the patient has no known risk factors for Alzheimer's disease.
- 40. The method of any one of claims 33-35, wherein the dose of the A $\beta$  fragment administered to the patient is greater than 10  $\mu$ g.
- 41. The method of any one of claims 33-35, wherein the dose of the A $\beta$  fragment administered to the patient is at least 20  $\mu$ g.
- 42. The method of any one of claims 33-35, wherein the dose of the A $\beta$  fragment administered to the patient is at least 50  $\mu$ g.
- 43. The method of any one of claims 33-35, wherein the dose of the A $\beta$  fragment administered to the patient is at least 100  $\mu g$ .
- 44. The method of any one of claims 33-35, wherein the A $\beta$  fragment is administered in aggregated form.

- 45. The method of any one of claims 33-35, wherein the A $\beta$  fragment is administered orally, subcutaneously, intramuscularly, topically or intravenously.
- 46. The method of any one of claims 33-35, wherein the  $A\beta$  fragment is administered intramuscularly or subcutaneously.
- 47. The method of claim 33, wherein the  $A\beta$  fragment is administered with GM-CSF in the regime.
- 48. The method of any one of claims 33-35, further comprising administering an adjuvant, wherein the adjuvant enhances the immune response to the  $A\beta$  fragment.
- 49. The method of claim 48, wherein the adjuvant and the  $A\beta$  fragment are administered together as a composition.
- 50. The method of claim 48, wherein the adjuvant is administered before the  $A\beta$  fragment.
- 51. The method of claim 48, wherein the adjuvant is administered after the Aβ fragment.
  - 52. The method of claim 48, wherein the adjuvant is alum.
  - 53. The method of claim 48, wherein the adjuvant is QS21.
  - 54. The method of claim 48, wherein the adjuvant is M-CSF.
- 55. The method of claim 48, wherein the dose of the A $\beta$  fragment is greater than 10  $\mu g$ .
- 56. The method of claim 48, wherein the dose of the A $\beta$  fragment is at least 20  $\mu g$ .

- 57. The method of claim 48, wherein the dose of the A $\beta$  fragment is at least 50  $\mu g$ .
- 58. The method of claim 48, wherein the dose of the A $\beta$  fragment is at least 100  $\mu g$ .
  - 59. The method of claim 48, wherein the A $\beta$  fragment is A $\beta$ 1-5.
- 60. The method of claim 59, wherein Aβ1-5 consists of the first five N-terminal amino acids of SEQ ID NO:1.
  - 61. The method of claim 48, wherein the A $\beta$  fragment is A $\beta$ 1-6.
- 62. The method of claim 61, wherein A $\beta$ 1-6 consists of the first six N-terminal amino acids of SEQ ID NO:1.
  - 63. The method of claim 48, wherein the A $\beta$  fragment is A $\beta$ 1-12.
- 64. The method of claim 63, wherein A $\beta$ 1-12 consists of the first twelve N-terminal amino acids of SEQ ID NO:1.